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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,767	06/20/2001	Ancil S. Taylor JR.	B6181	4002

378 7590 04/16/2003

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EXAMINER
CECIL, TERRY K

ART UNIT	PAPER NUMBER
1723	7

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/885,767	Applicant(s) TAYLOR, ANCIL S.
	Examiner Mr. Terry K. Cecil	Art Unit 1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Applicant has canceled the non-elected invention.

Claim Objections

Applicant's amendments to the claims have obviated the claim objections of the prior office action.

Claim Rejections - 35 USC ' 112

Applicant's amendments to the claims have obviated the 112 rejections of the prior office action.

Claim Rejections - 35 USC ' 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Determining the scope and contents of the prior art.
Ascertaining the differences between the prior art and the claims at issue.
Resolving the level of ordinary skill in the pertinent art.
Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor, Jr. (U.S. 5,269,635), hereinafter "Taylor" in view of the Japanese Reference 56059931-A, hereinafter '931, and in view of Sheets (U.S. 2002/0113017-A1). Taylor discloses a slurry processing system comprising the following:

- a slurry processing unit aboard dredging barge 12 coupled to an onshore chemical treatment facility 16 via a slurry delivery line 14 [as in claims 1, 3 and 4];
- a slurry processing unit that includes a sludge hopper 22, a make-up water pump 30, make-up water piping (e.g. 60 and connected lines), a slurry inlet pump 26, a slurry discharge pump 32, and discharge inlet piping 28 (slurry piping); discharge piping 40 connected between the discharge pump and the slurry delivery line 14 [as in claims 2 and 3];
- the following limitations of claim 4 including a discharge pump 32, inlet slurry pump 26, and slurry piping therebetween; discharge piping 40 connected between the discharge pump and the slurry pipeline, wherein the slurry pipeline is buoyant; and a make-up water line including a plurality of injection stations for specific gravity adjustment (via control signals 92, 94, 96) [as in claim 4].

Taylor does not disclose a make-up water return line connected between the treatment facility and the slurry processing unit for returning the water separated from the slurry to the processing unit. However, '931 teaches such a water make-up return line 9 [as in claims 1, 2, 3 and 4] that returns water separated from the "treatment facility" that includes containment tank 5 to a sludge container 11 (analogous to the hopper of Taylor) of the slurry processing unit. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to

have the make-up water return line of '931 connected between the make-up water pump 30 and the onshore treatment facility 16 of Taylor and to include a line to introduce make-up water into the box (hopper 22) of Taylor, since '931 teaches benefits of using recycled water for transporting dredged slurry between a slurry processing unit and an on-shore treatment facility without contaminating water quality and without discharging the contaminated water and muddy water into a body of water (as explained on page 2 of the translation included herewith). It would also be obvious to the skilled man to recycle the water in order to prevent toxic slurry contaminants that may remain in the separated water from contaminating the land area around the treatment facility—in order to comply with laws established by the EPA (such laws are explained by the applicant on page 3).

Taylor teaches a buoyant slurry delivery line; upon modification with '931, it would have been obvious for the make-up line to be buoyant as well [as in claims 3 and 4], since both lines are connected between the same processing unit and treatment facility. Also upon modification, the make-up pump 30 of Taylor would be considered a booster pump and the pump 4 of '931 at the on-shore containment tank would need only be a low pressure type [as in claim 2] when added to Taylor since the water/air stream for dredging would not be present (in Taylor such is accomplished by other elements of the dredging barge).

Note: The treatment facility and the elements thereof listed in the preambles of the independent claims are interpreted as being in combination with the elements listed in the body of the claims.

Applicant has amended the independent claims to require the on-site treatment facility to include a "means for discharging a chemical decontamination reagent into the containment vessel" for treating the slurry. *The equivalent structure for the aforementioned "means for" clause is the spray nozzle assembly 114 shown in e.g. figure 4.* Although Taylor teaches chemical treatment at the on-shore facility, he does not teach a spray nozzle assembly for discharging reagent into a containment vessel. However, such is taught by Sheets—as shown in figure 2 thereof [as in claims 1, 3 and 4]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the spray assembly of Sheets in the containment tank of Taylor, as modified by '931, since Sheets teaches the benefit of removing toxic materials from dredged slurry to prevent contamination (abstract).

Response to Arguments

3. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new grounds of rejection necessitated by amendment. However, it is pointed out that eventhough applicant argues a "closed loop system", such has not been claim. But that upon modification of Taylor with '931, the recycled process water is contained and kept separate from the body of water—which is the essence of applicant's invention.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (703)305-0079 for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:00a to 4:30p, on at least four days during the week M-F.
- The group receptionist can be reached at (703)308-0661 for inquiries of a general nature or those relating to the status of this or proceeding applications.
- Wanda Walker, the examiner's supervisor, can be reached at (703)308-0457 if attempts to reach the examiner are unsuccessful.
- Fax numbers for this art unit are as follows:

  i. (703)872-9310 for *official* faxes (i.e. faxes to be entered as part of the file history) that are not after-final; and

  ii. (703)872-9311 if after-final.

JOSEPH DRODGE
PRIMARY EXAMINER

TKC
April 14, 2003